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EXAMINER	
YUEN, KAN	

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2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/628,427	PETERSON ET AL.	
	Examiner	Art Unit	
	KAN YUEN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 25-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,and 25-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see remark page 2, filed 11/30/2007, with respect to the rejection(s) of claim(s) 1, 9 ,25 under 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Haeri et al. (Pub No.: 2003/0031178), and Miller et al. (Pat No.: 6987781).

Claim Objections

2. Claim 5 is objected to because of the following informalities:

In claim 5, lines 2-3, the term "signalling", should be changed to "signaling". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 9, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Haeri et al. (Pub No.: 2003/0031178), and Miller et al. (Pat No.: 6987781).

For claim 1, Craig et al. disclosed the method of each of the application server process groups distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway (see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) The MASP A (272) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-0. Where the DCM is the signaling gateway; each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server process groups (see paragraph 0038, lines 1-15, paragraph 0041, lines 1-10, and see fig. 4) is the first group processor which has one processor, and MASP B (272) is the second group which has one processor. Both groups are sharing the same point code PC: 5-0-0. The groups are coupled with the LIM and DCM modules to provide application services; receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified

attributes (see paragraph 0014, lines 1-17). The EOS routing node received ss7-messages comprises DPC; identifying by a signaling gateway one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes (see paragraph 0014, lines 1-17). The EOS routing node determines the message is intended for the remote application based on the SS7 signaling point code; selectively sending by a signaling gateway to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group (Craig et al. see paragraph 0086, lines 1-10). When the remote level four application is unavailable, the remote level four application will send controlled message indicating congestion.

However, Craig et al. did not disclose the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server process groups, and receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node.

Haeri et al. from the same or similar fields of endeavor teaches the method of determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server process groups (Haeri et al. paragraphs 0029-0031, fig. 1, classifier 109, and traffic shaper 110). The IP address/port classifier 109 monitors packet traffic passing through to the router 102, and class-based queue traffic shaper 110 dynamically controls the maximum bandwidth for teach connection through a switch

112 to any devices 114 or 116. Each of the devices can be customers who have brought high levels of services that support IP-telephone calls. Therefore the units 109 and 110 combined can be the signaling gateway.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the traffic shaper 110 in the network of Craig et al. The motivation for using the method as taught by Haeri et al. in the network of Craig et al. being that it provides stable transmission rate by limiting overloading conditions.

Miller et al. from the same or similar fields of endeavor teaches the method of receiving by a signaling gateway an SS7 message having an originating point code specifying an originating node (Miller et al. column 4, lines 53-67, column 5, 1-12). The message routing process examines OPC and DPC values contained in incoming ISUP IAM data packet.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the ISUPIAM data packet in the network of Craig et al. The motivation for using the method as taught by Miller et al. in the network of Craig et al. being that it reduces system resources.

Claims 9 and 25 are rejected similar to claim 1.

6. Claims 2-4, 10-12, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Haeri et al. (Pub No.:

2003/0031178), and Miller et al. (Pat No.: 6987781), as applied to claims 1, 9, and 25 above, and further in view of Archer (Pat No.: 6747955).

For claims 2, 10, 26 Craig et al., Haeri et al. and Miller et al. disclosed all the subject matter of the claimed invention with the exception of the determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration. Archer from the same or similar fields of endeavor teaches the use of determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration (see column 3, lines 5-30). In the reference, the signal transfer point 16 is setup for monitoring congestion in connections between service switching points 20. The status of a link is rated from level 0 to level 3, where level 0 is no traffic, and level 3 is maximum traffic. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. The motivation for using the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. being that it will determine a link to route the message based on the congestion level of the message.

Regarding claims 3, 11, 27 Archer also disclosed the method of for the traffic configuration for a corresponding application server process group includes an override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. The

motivation for using the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. being that it will determine a link to route the message based on the congestion level of the message.

Regarding claim 4, 12, 28 Archer also disclosed the method of selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. The motivation for using the method as taught by Archer in the network of Craig et al., Haeri et al. and Miller et al. being that it will determine a link to route the message based on the congestion level of the message.

7. Claims 5-8, 13-15, 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (Pub No.: 2003/0108067), in view of Haeri et al. (Pub No.: 2003/0031178), and Miller et al. (Pat No.: 6987781), as applied to claims 1, 9, and 25 above, and further in view of Delaney et al. (Pub No.: 2004/0141514).

For claims 5, 13, and 29, Craig et al., Haeri et al. and Miller et al. disclosed all the subject matter of the claimed invention with the exception of a first and second of the application server process groups are configured for providing Signaling Connection

Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes. Delaney et al. from the same or similar fields of endeavor teaches the method of a first and second of the application server process groups are configured for providing Signaling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes (Delaney et al. See paragraph 0011, lines 8-17). Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Delaney et al. in the network of Craig et al., Haeri et al. and Miller et al. The motivation for using the method as taught by Delaney et al. in the network of Craig et al., Haeri et al. and Miller et al. being that it provides congestion control to the system.

Regarding claim 6, Delaney et al. also disclosed the method of receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15);

Regarding claim 7, Delaney et al. also disclosed the method of selectively outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 8, Delaney et al. also disclosed the method of the selectively outputting includes identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process (Delaney et al. See paragraph 0049, lines 1-10). As disclosed in the reference, in response to the TFC message sent by the signaling point, any server (Fig. 8, e.g. 500, 502) can send a request message to the signaling point for alternate route.

Regarding claim 14, Delaney et al. also disclosed the method of the receiving means is configured for receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15); the identifying means configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit (Delaney et al. See paragraph 0035, lines 1-20) and (See fig. 6, box 420); the determining means configured for sending the second message signaling unit to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion

level of the second candidate group and independent of the congestion level of the candidate group (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 15, Delaney et al. also disclosed the method of the determining means is configured for outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 30, Delaney et al. also disclosed the method of the switched circuit network interface is configured for receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (Delaney et al. See paragraph 0043, lines 1-15); the routing circuit configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit (Delaney et al. See paragraph 0035, lines 1-20) and (See fig. 6, box 420); the congestion level detection circuit configured for causing the second message signaling unit to be sent to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of

the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 31, Delaney et al. also disclosed the method of an Internet Protocol (IP) based output circuit configured for outputting the second message signaling unit to the identified active one of the application server processes (Delaney et al. See paragraph 0047, lines 1-12).

Regarding claim 32, Delaney et al. also disclosed the method of the congestion level detection circuit is configured for causing the message signaling unit to be output to an identified one of the assigned application server processes of the candidate group based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (Delaney et al. See paragraph 0049, lines 1-18).

Regarding claim 33, Delaney et al. also disclosed the method of the congestion level detection circuit is configured for identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process (Delaney et al. See paragraph 0049, lines 1-10). As disclosed in the reference, in response to the TFC message sent by the signaling point, any server (Fig. 8, e.g. 500, 502) can send a request message to the signaling point for alternate route.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

KY